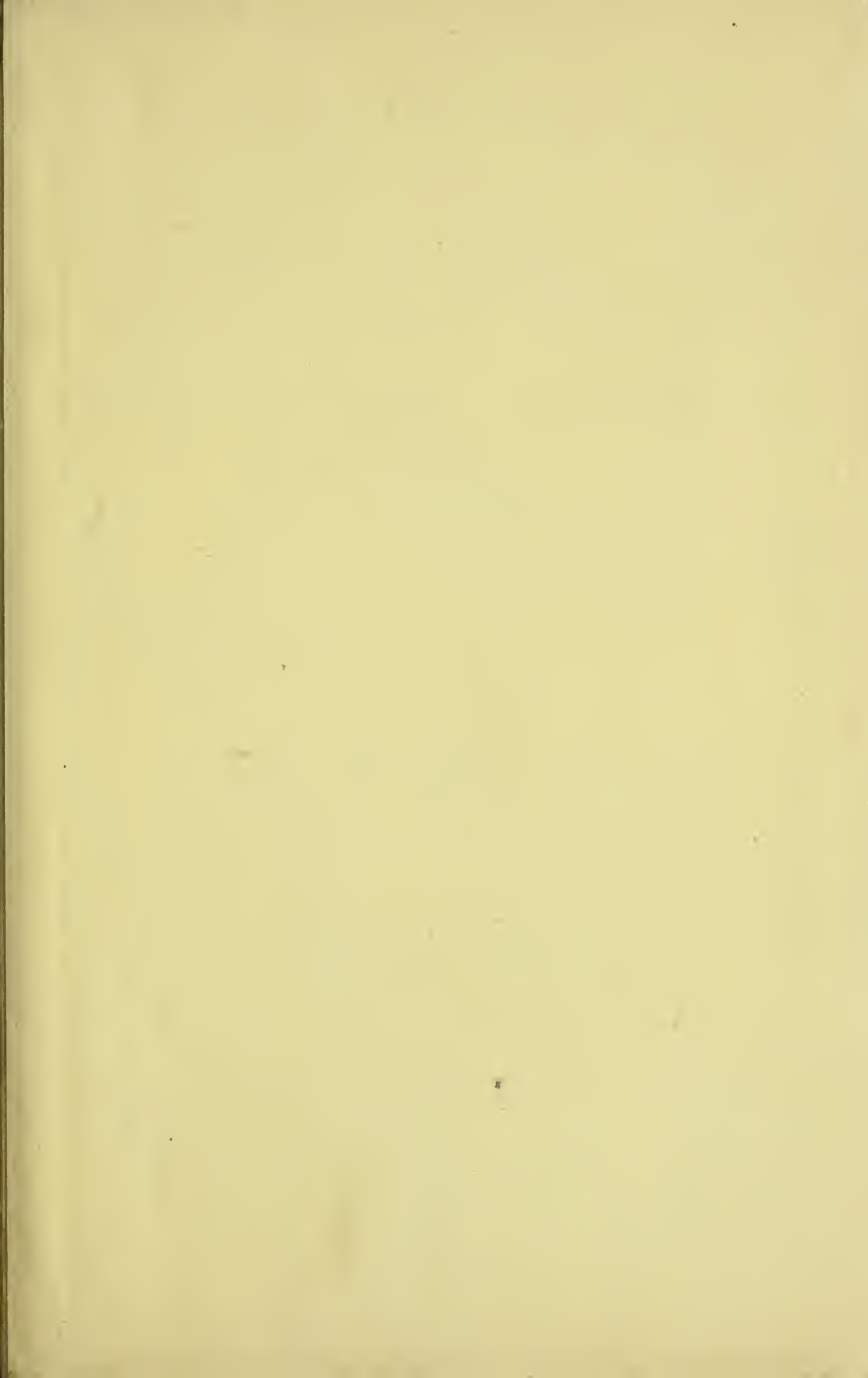



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THE HISTORY  
OF THE  
PLAGUE OF ATHENS;

Translated from Thucydides.

WITH

REMARKS EXPLANATORY OF ITS PATHOLOGY.

BY

CHARLES COLLIER, M.D., F.R.S.,

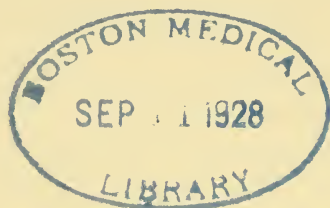
FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, FELLOW OF THE  
ROYAL COLLEGE OF SURGEONS (HON.)

"Post Herodotum Thucydides omnes, dicendi artificio, mea sententia, facile vicit; qui ita creber est rerum frequentia, ut verborum prope numerum sententiarum numero consequatur: ita porro verbis aptus et pressus, ut nescias utrum res oratione, an verba sententiis illustrentur."—CICERO, *De Oratore* ii, 13.

LONDON:  
DAVID NUTT, 270, STRAND.

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1857.



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T. RICHARDS, 37 GREAT QUEEN STREET.

## PREFACE.

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THE object of the following pages is to give a more accurate version than, as it is believed, has yet appeared of Thucydides' account of the so-called plague of Athens, together with a commentary which may serve to elucidate passages which, hitherto, from want of professional knowledge, have either been misunderstood or ill appreciated. And his description of the pestilence itself has been prefaced by an historical epitome, which may be acceptable to the general reader as means for realizing the topic under discussion ; while

references to the several chapters of the history will show the sources from which it has been derived.

If it be asked what interest is to be elicited, or what purpose answered by this inquiry, the author would answer that, should it contribute something, however small, to the present scanty knowledge of epidemics, or call more attention than has as yet been paid to their nature and influences, this work will have an obvious value; and a still higher value if it should induce others to investigate other instances of these visitations, and so assist towards bringing the nature and treatment of each and all of them under the laws which science has derived from the animal economy. But, independently of these



purposes, it would be supererogatory, in this day, to set about proving that the investigation of a pestilence which, in a bygone age, afflicted a highly civilized people and jeopardied their political existence, must have some relation and, therefore, be of some value to, ourselves, since our best, or rather our truest knowledge is that which enables us to perceive clearly the relations of life, and, by comparing past with present and conditions with conditions, tells us whether we are or not profiting by our opportunities, and widening the sphere as well of our intellectual and moral capacity, as of our theoretical and practical science. It is too late, however, once a book has gone forth, to speculate upon the value which may be attached to

it, since public opinion is an ordeal which must be gone through before that issue can be tried ; but, if it have been written truthfully, and with the sole desire of calling attention to what is or seems to be profitable, the labour bestowed upon it cannot have been altogether in vain.

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## ERRATA.

- Page 2, line 14. For "A.C.", read "B.C."  
" 15, " 11. For "Syrdus", read "Syræus".  
" 30, " 4 of Note. For "Noc.", read "Nos."

## INTRODUCTION.

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As the history of an epidemic, even an epidemic which may have afflicted our own country in a former age, can, usually, have but little interest for the general reader in a succeeding generation, some apology may well be required for an attempt to investigate one which arose and desolated a foreign land, ages before England had any standing among nations. And that apology, strange as it may appear, is to be found in the superiority of the method adopted by Thucydides in delineating that which, in his own day, appeared in Athens ; for although other contemporary

writers, at different periods, have recorded some of the most destructive of these visitations, still the description which he has transmitted to us, is, at once, the earliest and the best. Should this appear to be too favourable an estimate, let it be recollected that the great historian was here intent upon a subject which must have taxed all his powers, and given to his words that living principle which only the more solemn realities of life can impart—he had, in fact, to describe, from personal suffering and personal observation, the symptoms of a direful pestilence; to unfold the moral disorder and confusion which followed in its train; and to gather up, for an abiding record, the varied and accumulated ills which conspired to afflict his country, in that hour of her severest trial.

It is obvious that the pestilence itself, considered as a disease, was a specialty with

which Thucydides was not professionally acquainted; and yet we may affirm that the more his account of it is scrutinized, the more it will be found to combine precision of method with closeness of detail; and that, while serving as a guarantee for his fidelity on other topics, it may even be regarded as a model of symptomatology. Now, he attained to all this by confining his description of the malady to what he had himself both felt and seen of it; for, by thus contracting his sphere, he avoided every allusion to medical or other dogmata, which, in all probability, would have falsified his judgment and distorted his perception. And with this view of the part which he had to perform, the historian, notwithstanding the defective science of his age, was, probably, as well qualified for its correct and judicious performance as can be any educated individual of modern society. For there

are few or none, it may be affirmed, even in our own time, apart from the medical profession, who can have clearer notions than he could have had of the nature of any disease, or who are better prepared for so grouping symptoms as to show, through them, the inward seat and cause—for framing, that is, a lucid and accurate clinical statement.

Society at large is, no doubt, aware that the brain is the seat and source of sensation, as also that the blood, by the heart's impulse, goes the round of the body several times in a minute; and if these general notions, however gathered or verified, be knowledge, then the unlettered may be said to know more than did even Hippocrates or Aristotle; and yet it might be shown that, even amid darkness, those enlightened men had many of those glimpses which, like intuitive perceptions, come to the earnest and truthful students of nature, and

reveal to them, although obscurely, science\* yet to be eliminated. Granted that, by the

\* To many readers it may not be known that Hippocrates had employed *Auscultation*, and, seemingly, as a mean already adopted in his practice for exploring pectoral affections. He has spoken, it is true, only of *Immediate Auscultation*, and that merely for detecting the presence of fluid in the chest and determining whether the fluid was lymph or pus; but it may be assumed that, in proportion as the thorax, the lungs, and heart should have become, structurally, better known, the same appliances would have been made equally applicable for discerning other changes in and disturbances of the respiratory and circulating systems. (*De morbis*, lib. iii.) His method was as simple as his description of it is graphic:—"The patient was seated on a firm stool of convenient height, and, while the arms were held out by an attendant, the auscultator, by placing his ear on the subject's side and shaking first one shoulder and then the other, readily ascertained, while listening, whether or not there was fluid within the cavity, and, if there was fluid, in which side it lay." But in none of these cases, which all, from his description, seem to have been forms of inflammation or pleuritis complicated with phthisis, did Auscultation lead him to overlook those other significant signs of internal change which are comprised in continuous fever, constant cough, local pain, and *inability to lie on the healthy side*, together with œdema of the feet and about the orbits. [It

labours of successive generations, facts have been accumulating, and hypotheses giving

It would appear strange that something so natural and so verifiable, so consonant, in fact, with common sense, as this happy expedient of Hippocrates should, for so many ages, have remained a dead letter, did we not know how much more frequently ancient writings have been and are studied for their literature rather than for the purpose of culling, from amid rude hypotheses and, perchance, fallacies, great general truths which, however to appearance elementary, would, if developed, have anticipated much of what had yet to be revealed. Laennec (*De l'Auscultation Immédiate*, chap. iii), to whom medicine is indebted for Auscultation as a perfect system, had, by his own admission, often dwelt upon the passage in question, but then it was for the purpose of reconciling its literal sense with different readings and commentaries—of studying it as a scholar, that is, irrespectively altogether of its value as a scientific invention. He has, indeed, ingenuously confessed that he had read the passage many years before the idea of *Mediate Auscultation* had first occurred to him by the recollection of some experiments in natural philosophy; but his eyes were then closed against the great truth which it conveyed, from being under an impression that, as it had so long remained in abeyance, it must needs be among the errors into which “that eminent man has sometimes fallen.” When, however, shortly after entering upon his own inquiries, the passage was again brought under his notice, he was sur-



way to theories which are embodiments of general truths, still as but few are prepared

prised at his former indifference to it, and wondered that it never had occurred to any practitioner to realize the same idea and bring it into practice. But although this inattention may at first surprise us, yet nothing, as this accomplished physician remarks, is more common or natural, since it is not given to any one to comprehend all the relations and consequences of the most simple fact; and, then, the secrets of nature are more frequently elicited by fortuitous circumstances than snatched from her by scientific investigations.

Thus much of Hippocrates; and it is unnecessary to dwell upon the claims which Aristotle has to the regard and, it may be said, the gratitude of all ages, as well for those researches in comparative anatomy, which laid down, with more or less precision, all that *Hunter practically carried out* or *Cuvier described*, as for those large inductions or generalizations, which had anticipated much of what science is only now developing. But as the anatomical and physiological writings of Aristotle were not the requirements of the Middle Ages, they lay as a dead letter, or, if referred to, were studied only by scholars who had no sympathy with his topics, and were insensible to the tendency of his investigations.

Still, although, had men's minds been differently ordered, society would, through the great Stagirite's labours, have been spared a lengthened period of comparative ignorance, yet this delay cannot in aught impugn his unwearied

for following the several steps which have led to their adoption, those theories, having been accepted on the authority of others, without personal application or study, are little more than words, which may exist in the memory without really ensuring a right apprehension of their bearing or application.

Hippocrates, according to all the chronologists, must have almost attained his thirtieth year at the time this epidemic broke out, and, as there is no allusion to the pestilence in any of the numerous works which are attributed to him, or any mention of his name by Thucydides, it may safely be inferred that the rumours, of his having been present in Athens when it broke out and having both prediligence and love of science, or invalidate the proofs, on every page, of the perspicacity and vastness of his intellectual endowments. And it would be almost idle to dwell upon the value of his writings on Ethics, Politics, and Literature, since they form the text books of the most enlightened nations of Europe.

dicted its coming and suggested measures for preventing its extension, are among the myths which ever attach themselves, in one form or other, to the biographies of distinguished individuals. It would be foreign to this inquiry to determine, if, indeed, the question could be determined, which of the works above alluded to are genuine; but it may be asserted, and certainly without derogating from what is due to the great father of physic, that many of them are by another hand and from a later age. One of his editors\* seems to maintain that his reputation grew after his death; and that he was, in part, indebted for the honour bestowed upon his name, as well as for those graceful allusions to him as an eminent physician and teacher, in the writings both of Plato† and

\* *Historia Literaria*, G. Kühn.

† *Phædrus* 55, *Protagoras* 3.

Aristotle,\* to the school which, on returning from his travels in Asia Minor and Persia, he had founded in his native island of Cos. No one, however, can rise from the study of some of those works,† more especially of those which treat of the moral obligations of the physician to his charge and his profession, (and which, if any, are undoubtedly his), without having imbibed a purer and higher sense of duty; or dwell upon others pertaining to practical medicine, such as the essay upon Epilepsy, which assigns its seat and cause to the brain, although the real office of the organ was then unknown, or that upon Tetanus, which he has delineated with striking clearness and vigour, without the conviction that Hippocrates was endowed with peculiar

\* *Politica* vii, 4, 5. *Meteorologia*, 1, 6, 3.

† *Hippocratis iuramentum*; *Lex*; *De Medico*; *De decenti Habitu*; *de Arte*.

perspicacity and strength of judgment—that he was, in fact, an extraordinary man. It is, then, a subject of regret, that this pestilence was not brought under his notice ; for although his account of it could have been compiled only from the statements of others who had witnessed it in Athens, his remarks could hardly have failed to supply some deficiencies, and throw light upon the prevailing opinions of his profession ; they might too, perchance, have shewn, incidentally, the amount of general knowledge and science diffused through the educated classes of his age.

It must be admitted that, as words largely influence the estimate of things, our inquiries into epidemics, whether for the purpose of ascertaining their individual character or speculating on their remote causes, have been distorted and impeded by their having gone, indiscriminately, under the vague term of

plague or pestilence. For this defective terminology has led, not only to their being excluded from nosological systems, but, by sanctioning or tolerating erroneous notions of their pathology, it has caused them to be regarded as abnormal incidents rather than as agents which, imperfect as may be our knowledge of their essential causes, are doubtless subject to definite laws; and being so, every epidemic may, by the hand of science, be traced to its incipient agency upon the body, and, through diagnosis, placed in its due relation to other and ordinary disturbances of health. Epidemics, however, besides their relation to suffering humanity, claim further attention from their being armed, so to speak, with a power which too often baffles the resources of the medical art, and still calls in question, as it did in the days of Hippocrates, the curative means of medicine. And not, it

must be conceded, without reason ; for although medicine, through physiology, has made the empiricism, to which it once was restricted, subservient to principles, or, in other words, from being an art has become a science, still it has not acquired over therapeutics a power at all equal to its diagnostic certitude—it has not practically realized, that is, what it seems, abstractedly, to promise. For if its professors can now, by their acquaintance with the varied tissues and functions of the body, discern the seat and causes of maladies which were mysterious agencies to the physicians of antiquity, yet this accession of sound theory profits but little, so far at least as practice is concerned, when the first links of the chain of disturbance are to be found in any one of the vital organs. What additional power, it may be asked, for the control of traumatic tetanus or epilepsy (which may be



taken as examples), does the knowledge of the brain and nerves confer upon this generation which was denied to that of Hippocrates, when the sentient system was yet unknown? And does not every epidemic point the same way, and shew that medicine is but a frail barrier against any disease of nature's mission?

Again, the tendency of an epidemic, as of every wide-spread calamity, the earthquake, flood, or tornado, is to call up propensities\*

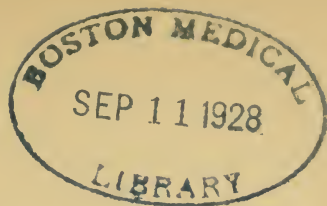
\* "Nature is often hidden, sometimes overcome, *seldom extinguished*. Force maketh nature more violent in the return, doctrine and discourse maketh nature less importune, *but custom only doth alter and subdue nature*."—Bacon's *Essay of Nature in Men*. Which emphatic words seem to imply that it is only by the formation of pious and virtuous habits, through early and judicious training and instruction, that, in social life, the tendencies of individuals can be directed, undeviatingly, and under all circumstances, towards that which is humane, improving, and self-denying—towards, that is, their allotted standard of perfection.



which otherwise might have lain dormant, and which, suddenly awakened by the opportunity, first makes society, accustomed only to its normal relations, aware of the grossness, ignorance, and depravity which lie unmitigated beneath its surface. Thus, like every national infliction, the epidemic is to the enlightened casuist a true moral standard for measuring society through all its grades, and determining whether or not it is progressing towards that degree of positive civilization and true perfection, which heaven has permitted man, in his present state of being, to aspire to.

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## THE PLAGUE OF ATHENS.

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### ERRATUM.

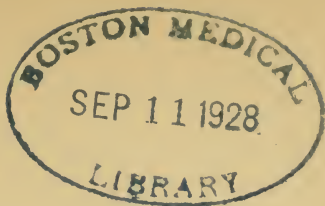
Page 56, line 8, *for σπασμόν, read ταῦτα.*

from the writings of the great historian, a brief summary of the events which happened shortly before and at the time of its outbreak.

[B. II. Chap. 2, 3, 4, 5.]

The political relations between Athens and Sparta, the two ruling states of Greece,—the





## THE PLAGUE OF ATHENS.

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THE epidemic which forms the subject of the following pages appeared in Athens, B.C. 430, at the opening of the second year of the Peloponnesian war. And in order to enable the reader better to appreciate the description of this terrible infliction, and estimate both the personal suffering and the desolation which followed in its train, we have given, from the writings of the great historian, a brief summary of the events which happened shortly before and at the time of its outbreak.

[B. II. Chap. 2, 3, 4, 5.]

The political relations between Athens and Sparta, the two ruling states of Greece,—the

one the representative of the democratic as the other was of the aristocratic party,—had long, from various sources of disquiet and jealousy, been disturbed, although their citizens still maintained, amid some reserve, their wonted intercourse. During this intermediate lull, which might be regarded rather as a truce than a peace, Thebes, one of the confederacy which acknowledged Sparta for its head, attempted, by a stratagem, to take possession of Platæa, a city of Bœotia, and one of the warmest allies of Athens. With this view, the Thebans dispatched early in the spring, **B.C.** 431, in the first watch of the night, a detachment of more than three hundred men, which, by the cooperation of partizans within the walls, succeeded in gaining an entrance into the city; but instead of seizing at once, as they had been advised, upon the leaders of the opposite party, the Thebans endeavoured,

by friendly overtures, to conciliate the inhabitants, and induce them to join their alliance on the same footing as the other Bœotians. As soon, however, as the first alarm was over, and the townspeople had ascertained the weakness of the force which had thus surprised them, the Thebans were, in their turn, attacked and, after a sharp struggle, utterly routed and either captured or slain. A much larger force had been sent from Thebes, while it was yet night, for the support, if required, of the first party; and learning on the way that the Plataeans had risen upon their assailants, it advanced as quickly as circumstances would admit of to their rescue. But although the distance between Thebes and Plataea is inconsiderable, a heavy rain which had fallen during the night retarded their march, while the Asopus was running with so full a stream as to be scarcely fordable, and

thus they arrived only to find that their men had either been slain or made prisoners. When the Thebans became quite aware of the extent of the disaster, they entertained the design of seizing upon the inhabitants whom they found outside the walls, to be as hostages for the safety of such of their men as might still be alive. But the Plataëans suspecting some intention of the kind, and alarmed for the safety of their people, sent out a herald to the Thebans to say, they had already acted with gross injustice by attempting, in a time of solemn treaty, to take forcible possession of their city, and ought not further to aggravate this wrong by injuring the inhabitants; that if, notwithstanding this remonstrance, they did so, the men whom they had in their hands should be put to death; but that, if they withdrew from their territory, the men should at once be given



back to them. Such, at least, was the statement made by the Thebans, who further declared that the Plataëans swore to its fulfilment; but the latter denied that they had promised to give back the prisoners immediately, or to give them back at all excepting upon terms to be previously agreed upon; and, further, that they had not entered into any engagement upon oath. Be this, however, as it may, the Thebans did withdraw from the territory without injuring person or property; but the Plataëans, after getting in their effects from the country, immediately slew the prisoners, one hundred and eighty in number; and Eurymachus, with whom the party within the city had been in communication, was one of them.

[Chap. 6.]

Having so acted, they dispatched a messenger to Athens; gave back to the

Thebans, under a truce, the bodies of the slain, and made such arrangements in the city as seemed best adapted to existing circumstances. Now, intelligence had speedily reached the Athenians of all that had taken place, and they at once seized upon as many Bœotians as were at the time in Attica, and sent a herald to the Platæans with orders not to come to any final resolution with respect to the Thebans in their hands, (for they had not yet heard of their having been slain), until they should have deliberated on the subject. And although the herald on his arrival found that the prisoners had been put to death, they, nevertheless, marched to Plataea, supplied it with provisions, strengthened the garrison, and transported to a place of safety the women and children, together with the un-serviceable men.

[Chap. 7, 8.]

After this attempt upon Platæa and manifest rupture of treaties, the Athenians began to prepare for war, as did the Lacedæmonians and their allies; and both parties, while sending embassies as well to the Persian monarch as to barbarians in other parts, from whom they could hope to derive any assistance, sought alliances with states which had never hitherto been subject to their influence. The two great powers were, indeed, intent upon objects of no common magnitude, and had prepared themselves for the coming struggle with means equal to the emergency; for besides the eagerness with which men naturally enter upon war, there were, at this time, both in the Peloponnesus and Attica, numbers of young men who, from inexperience, were not unwilling to be engaged in it, while the rest of Greece was on the tiptoe of

expectation at the approaching conflict between the ruling states. The sympathies of men were so generally in favour of the Lacedæmonians, because of their professing to be actuated only by the wish to secure the independence of Greece, that individuals and states alike were eager and ready, by word and deed, to cooperate with them. But this feeling was more especially attributable, it must be added, to the oppressive character of the foreign policy of the Athenians, which roused some to action from the hope of being emancipated from their dominion, and induced others to join the opposite league from the apprehension of being, sooner or later, made subject to them.

As it would be foreign to the main topic of this inquiry to follow the historian into the recital of the several states which constituted the confederacy of Sparta or Athens, or detail

their respective means for supporting and continuing the contest, it will be sufficient to add that, very shortly after the occurrences at Plataea, the Lacedæmonians sent orders to their allies in the Peloponnesus, and their confederates beyond it, to prepare for an irruption into Attica; and that, at the time appointed, two-thirds of the contingent from each of the states were assembled on the Isthmus.

[Chap. 10, 11, 12.]

When all was ready for the invasion of Attica, Archidamas, king of the Lacedæmonians, who commanded the expedition, convened the principal persons, both civil and military, of the confederacy, and having laid before them the causes which had led to the present armament, he dwelt upon the necessity for skill and discipline, while advancing into a country so warlike and powerful as

that into which they were about to carry war. Having addressed them to this purport and dismissed the assembly, Archidamus first dispatched Melesippus, a Spartan, to Athens, to try whether the Athenians might be more disposed to give way, when they should see that the allied forces were really in motion. But the Athenians neither admitted him into the city nor gave him an audience, as they had already, in deference to the opinion of Pericles, adopted the resolution, not to receive any proposal whatever from the Lacedæmonians, so long as they were in arms beyond their own frontiers. They therefore ordered Melesippus back without a hearing, and commanded him to cross their boundary that same day, and say to those who sent him, that, in future, if they had anything to propose, they should explain themselves through ambassadors after having retired to their own terri-

tories. And in order to prevent all intercourse with the inhabitants, Melesippus was sent away under an escort, and he is said to have exclaimed, on being released by his guard on the frontiers: "This day will be the beginning of direful calamities to Greece." When he reached the camp, and Archidamas had learned that the Athenians would not yet in aught yield, he broke up with the army and advanced into their territory; while the Bœotians, mindful of their recent disaster, besides furnishing their contingent to the Peloponnesians, sent a strong force to lay waste the land of the Platæans.

[Chap. 13.]

While the Peloponnesians were still assembling at the Isthmus, and were on their march for the invasion of Attica, Pericles, perceiving that an inroad was really resolved upon, and suspecting that Archidamas, because he hap-



pened to be his friend, or as a device enjoined by the Lacedæmonians for exposing him to misrepresentation, might often pass by his lands while laying waste those of others, declared before the assembly that his personal relation should in no wise tend to the prejudice of his country, and that, should Archidamas make any exception in his favour, the estates and houses so spared should be at once given up as public property. And he renewed the opinions which he had on other occasions recommended, and which he still held to be especially adapted to existing circumstances, —advising his countrymen to prepare resolutely for war, and remove with their effects from the country ; to remain on the defensive in the city, and on no account risk a battle beyond its walls ; and, further, to fit out their fleet, in which lay their real strength, and by it protect their allies and keep their confeder-



ates, from whom much of their revenue was derived, in subjection. And to animate his countrymen the more, he laid before them a detailed statement of their present means and future resources, both in men and money.

[Chap. 14.]

This undaunted resolution which the Athenians, at the suggestion of Pericles, carried out, of removing with their households from the surrounding country, of pulling down the wood-work of their buildings and whatever else could give shelter to an enemy, and sending away the sheep and cattle to Eubœa and the neighbouring islands, gives additional interest to the fearful occurrences of the following year. For when the first appearance of the epidemic in Athens is taken in connexion with this vast and sudden migration, we are led to question the opinions which prevail concerning the emanation of contagious dis-

orders and the agents which lend to them their peculiar virulence; and still to inquire whence it comes, that, after having attained to the acme of their power, they are gradually mitigated, and eventually lost.

[Chap. 15, 16, 17.]

Although a general removal such as that alluded to must, necessarily, at all times and under any circumstances, be attended with fearful loss, anxiety, and suffering, yet to the Athenians it cannot but have been peculiarly painful, because, from the earliest date of their history, they had been singularly attached to a country life. It is obvious that the arrival of this crowd of fugitives must have been fraught with confusion, misery, and privation; and it scarcely requires the authority of the historian to believe that, although a few had houses in Athens and others had friends under whose roofs they

could take shelter, the greater number must have been compelled to occupy the vacant spaces in the city, together with the open temples and hero-chapels; while many would have to convert into habitations, as best they could, the towers of the walls. So, too, as the city afforded not sufficient accommodation for this assembled multitude, numbers eventually had to occupy the long walls, which had been duly portioned out, as well as the greater part of the ~~Syracus~~. *Syracus*

[Chap. 18.]

While the Athenians were thus devoting themselves to what may be considered a political necessity, the Peloponnesians moved forward to Cœnoë, a fortified town on the frontiers of Attica, from which they intended to make their inroad; and, being unwilling to leave such a post in their rear, they made their preparations for breaching the walls or

carrying it by assault. But as all the attempts failed, they might be said to have wasted valuable time before it, as the Athenians took advantage of the interval thus afforded them, for transporting their property from the country. And, on account of this delay, Archidamas became the subject of the loudest complaints, and the more so as he had been considered supine in the early preparations for the war, and even indisposed, from an imputed partiality for the Athenians, to its active prosecution. Then, again, the protracted stay at the Isthmus, after the forces had been assembled, and the slowness of the first advance, were additional charges against him ; as the Peloponnesians believed that, but for his dilatoriness, they might have found everything still out and exposed to capture. Such was the angry feeling of the army towards Archidamas during the siege of Œnoe ; but he, it

was said, was waiting in full expectation that the Athenians would shrink from the prospect of their country being laid waste, and give way while their land was yet unravaged.

[Chap. 19, 20.]

As, however, all their efforts against the place were ineffectual, and the Athenians made no overtures for peace, the allies advanced into Attica, about eighty days after the events at Plataea, when the summer was at its height and the corn ripe. After a short halt, they first laid waste Eleusis and the Thriasian plain; routed some Athenian cavalry at a place called Rheiti, and continued their march to Acharnæ (which was the largest of the townships, and seven or eight miles north of Athens), where they formed an entrenched camp, which they occupied a long time, and from which they laid waste the surrounding country. And here again, for

remaining thus long on the defensive at that place, Archidamas was exposed to misrepresentation; but his own reason for not venturing into the plain, during this incursion was the belief, that the Athenians, who had never been better prepared for war than at this juncture, would, from impatience at seeing their country laid waste, come out against him. But finding that his enemy could not be drawn into a general engagement, he broke up from that place, and, ravaging as he went, retired, by way of Bœotia, and disbanded the army. This hostile force had not yet quitted Attica, when the Athenians dispatched a fleet, having on board a strong body of infantry, to cruize round the Peloponnesus and carry war, as opportunity offered, into their enemies' territories; and this fleet was actually so employed, and generally with success, while the

confederates, having exhausted their supplies, were on their way to their several states.

[Chap. 47.]

Notwithstanding all this anxiety, distress, and suffering, when the causes which act prejudicially upon the mind and body cannot but have been unusually prevalent, Athens retained its wonted state of health. And during this winter, which at its close completed the first year of the war, the Athenians, following the custom handed down by their forefathers, celebrated, with great pomp, the funeral of those who first had fallen in the war. Pericles was the person deputed to address the people on the occasion ; and from a lofty platform above the sepulchre which was to receive their remains, he delivered that oration, which must ever be regarded as a model of political reasoning and eloquence.

At the very commencement of the next



summer, the Lacedæmonians and their allies, still under the command of Archidamas, invaded Attica with two-thirds of their forces, as on the former occasion ; and, after encamping, they laid waste the country. But they had not been many days in Attica before the epidemic, which is the immediate topic of this essay, first began to appear among the Athenians ; although, if rumour might be credited, it had previously shewn itself in Lemnos and the adjoining territory. And such a pestilence as this, and such destruction of life as followed in its train had never before, the historian observes, been witnessed. Physicians at first, from unacquaintance with its nature, were unsuccessful in their treatment of it, and, indeed, they themselves, from their attendance upon the sick, died in a far greater proportion than others ; nor was any other human art of any avail. So, too, all the re-



sources of religion, whether supplications in the temple, or divinations, or other like means, were equally inefficacious, and, at length, overcome by the infliction, men came to lay even these aside.

[Chap. 48.]

The disease was said to have begun in that part of Æthiopia which is above Egypt, to have come down into Egypt and Libya, and, thence, to have invaded a great part of the Persian dominions ; and it had been heard of about Lemnos and its neighbourhood before it reached the Pyræus, whence it soon spread, with increased violence, to the upper city, or Athens. And as the Pyræus, where it first broke out, is without springs, the people were for a time disposed to attribute this deadly malady to poison which the Peloponnesians had thrown into their water-tanks or reservoirs.

As a prelude to the symptoms of the

malady, the historian says, "let every one, whether or not professionally acquainted with medicine, speak, after his own knowledge, concerning it; let him shew from what source it was likely to have arisen; and what the cause which he thinks adequate to account for the change thus suddenly wrought from health to sickness. As to myself," he continues, "I shall describe it such as it was; and so explain its symptoms, both from having suffered under it and having witnessed it in others, that every one, should it ever reappear, may, by reference to this record, being forewarned, be prepared for its reception."

[Chap. 49.]

It was universally admitted that the year\*

\* It may, from its universal occurrence, be regarded as a law, although here alluded to as a particular incident, that the year in which an epidemic breaks out is relatively free from other maladies, as also that those which do occur are tinged, so to say, by that prevailing disorder,

in which it broke out, was peculiarly free from ordinary disorders; as also that if any individual were suffering under any previous illness, the symptoms of that illness assumed, eventually, the character of those of the prevalent malady. When,<sup>(1)</sup> however, it was established, persons in full health were seized suddenly, without any ostensible cause, with hot flushes about the head, redness and turgescence of the eyes, while the parts within, both the pharynx and the tongue, became, at once, blood red, and the breath was extremely fetid; and in succession to these symptoms, followed sneezing and hoarseness. Shortly afterwards<sup>(2)</sup> the disorder descended into the chest, occasioning a which is able to give its own colour to and absorb all others. Thus, diarrhœal disorders prevail before and during outbreaks of cholera; and fevers of periodical type before and during the prevalence of wide-spread remittents.

(<sup>1</sup>) See Excursus I, further on. So with (<sup>2</sup>) and (<sup>3</sup>).

violent cough, and, settling on the heart, it caused both a reversion of the heart and every kind of bilious evacuation which has ever been designated by physicians; and these were accompanied by great distress, that is, to use medical terms, were accompanied by tormina and tenesmus. A hollow hiccup came on in most cases, giving rise to a violent spasm, which, in some instances, ceased soon, and in others only after a considerable interval. The surface<sup>(3)</sup> of the body was neither very hot to the touch, nor was it pale, but reddish, livid, and covered with small vesicles and sores; while, inwardly, it was so burnt up that the sufferers were impatient of garments of the lightest tissue or covering of the finest linen; their only desire, in fact, was to lie naked. Thus, they longed for nothing so much as to cast themselves into cold water; and many, who were not well

attended to, urged by an unquenchable thirst, actually did so, by plunging into the cisterns ; and yet, whether they drank much or little, it was all the same. The distress caused by restlessness (by jactitation, that is, to use professional language), and want of sleep, pressed heavily upon the sufferers throughout ; and yet, so long as the disease was at its height, the body was not sensibly emaciated. On the contrary, it resisted this accumulated suffering so far beyond expectation, that most of those who perished by that internal heat, within the seventh or ninth day of the disease, retained to the last somewhat of their natural strength. Very many, however, of those who survived those critical days, were eventually carried off by the debility and exhaustion which ensued from the disease passing down into the abdomen, and there causing extensive ulceration together with

profuse diarrhœa. For the disease, which had its first seat in the head, beginning from above, passed through the whole body, and, if any one did get safely through its most dangerous stages, he had yet to endure a seizure of the extremities, which left traces of its virulence behind. The malady, in fact, lighted upon, or rather, to speak medically, it was, by a process of metastasis, resumed in the pudenda, the fingers, and toes, with such violence, that many of those who recovered were not only deprived of those parts, but some of them also lost their eyes ; while others, at the commencement of their recovery, had so completely lost their memory as to have no recollection either of their friends or themselves.

[Chap. 50.]

The character of the disease, in fine, was violent beyond description, and while, in other

respects, it attacked individuals with a severity beyond what human nature could well endure, in this it shewed itself to be something different from other maladies, that the birds and beasts which prey on human bodies, of which many lay unburied, either did not approach them or died after having tasted them. As proof of which, there was a manifest scarcity of birds of that kind; none indeed were to be seen either in the neighbourhood or about the dead, but the dogs, from being domesticated with men, afforded better evidence of the result alluded to.

Before entering upon the historian's record of the social ills which followed in the train of this epidemic, it will conduce to a better appreciation of the symptoms just enumerated, if, under the guidance of pathology, we determine what was its character, and what the influences which must of necessity have ema-



nated from it. And here the reader may be reminded that as Thucydides was not practically acquainted with medicine, his account of the malady, however graphic, occasionally betrays a want of clinical knowledge; and that still greater allowance must be made for the several versions of it, as these all, and for the same reasons, bear traces both of vagueness and misapprehension.

Having thus shown why the character of this epidemic has been but little understood, and, instead of being brought under nosological principles, left as an abnormal incident, it may at once be stated, that it was that species of *Scarlatina* which has been designated *maligna*; and that, if there was any deviation from this form, it must have belonged to the *sp. anginosa*, or that in which the morbid action is confined to the fauces and throat.\*

\* The denomination *Scarlatina* was first applied to this



The general term *Scarlatina*, which is derived from the colour of the skin, had its origin, no doubt, in popular language, and so far as terminology, which ought to have a professional tendency, can influence our studies, it is inapplicable to medical science; but, like many other incongruities in nomenclature, it has secured for itself a position which can be uprooted only by wider knowledge, and the changes which that knowledge must of necessity bring about.

disease by British writers; however offensive the term may be to a classical ear, it cannot well be displaced, having found admission into all the systems of nosology. Another age will correct and refine the language now used on subjects introduced by the fathers of physic.”—(Willan *On Cutan. Diseases, Scarlatina*, p. 253). “Nomina morbi varia, erronea sæpe, ineptaque, quibus eum medici quondam appellarunt, laudatis in scriptoribus invenire est, scarlatinæ nomine, barbære satis, a colore panni vulgo sic appellati, mutuato, civitateque, ut videtur, in arte donata. Est febris acuta, exanthematica, rubras easdemque latas maculas proferens,” et cætera. (De Haen, *Rat. Med. Continuut.* t. i, c. 7.)

Such was the nature of this disorder—it had spread epidemically, while it acted contagiously, over a long track of country—had passed over the Ægean and affected all the contiguous countries, while retracing, so to speak, its steps, it settled for a time on Athens. The features or symptoms which have been noted by the historian are, substantively, such as are met with at the present day, and however modified may be the malady, by climate, soil, and season, it has still the tendency to spread\* epidemically. The acute and, of course, most deadly attack of the epidemic in question was closed on the seventh or ninth day; many who survived that critical period died after indefinite intervals, under secondary

\* “Spatio quadraginta annorum scarlatinam sexies vel septies in Scotiâ epidemicam observavi, et in unoquoque exemplo morbus illius specei erat quam scarlatinam anginosam vocat Sauvagesius.” Culleni *Synopsis Noë. Meth.* Willan has also dwelt upon the tendency of this affection to spread epidemically.

symptoms which constituted its chronic stage; and no one, if the record may be trusted, was subject to it a second time. But this immunity from a second attack has been much questioned, although opinions are disposed, generally, to admit that scarlatina is either a prophylactic against itself, or else a modifying influence; and the difference between those who maintain and those who deny this may, after all, depend upon the tendency of mankind to generalise from individual experience. Now, it is easy to account, pathologically, for the symptoms of each stage of the malady, as also to perceive why it terminated fatally, sometimes in a few days, and sometimes by secondary actions, after a longer or shorter struggle; yet some consequences are attributed to it, as the loss of the pudenda, the eyes, fingers, and toes, which may be regarded as exceptional consequences, or else, since

history must overlook specialties, as a misemployment of general terms.

The epidemic, then, in question, was Scarlatina, or inflammation of the mucous membrane: it began in that part of the membrane which is apportioned to the head and orbits, and passed, successively, along the organs contained in the chest and abdomen, down to the termination of the intestinal canal, where its acute stage was stayed. For the mucous membrane is the internal lining of the cavities, which communicate, by their several openings (as the nares, mouth, pharynx, larynx, and associated organs) with the skin, which itself is a mucous membrane. "Mucous membranes may be regarded,"\* Bichat says, "as internal teguments, which, by their office, serve to protect the organs from the contact of foreign bodies. The most frequent dis-

\* *Maladies du Système Muqueux*, lib. vi, p. 76.

order to which this system is exposed is inflammation, and in whatever part of the body the tissues which compose it are met with, they present, under their several degrees of irritation, the same phenomena, of which many are known under the designation of catarrhs. And a special character of these mucous phlegmasiæ is to become epidemic." Thus, the skin being a mucous membrane (and it is so designated from the matter with which it is lubricated), may be said to line the interior of all those hollow organs, as they have been called, (such as the mouth, œsophagus, stomach and associated parts, the larynx, trachea and their dependencies), which communicate with the exterior through the different openings, with which the skin, so to speak, is furnished. The bare statement of the position and uses of these mucous surfaces, thus widely spread and delicately organised, is sufficient

to shew how, when inflamed or otherwise disordered, they cannot but create, by their many relations and sympathies, such disturbance of the constitution at large, as either to destroy life, or else, by organic changes, suppress or injure some faculty of the mind or property of the body.

Having determined the generic character of the epidemic, and shewn both its seat and, to use professional language, its proximate cause, we are better prepared as well for scrutinizing the historian's statement of the symptoms, as for fixing the value of some terms which are equivocal, and elucidating others which, relating to clinical medicine, are, when pathologically considered, inaccurate. It may be observed that the belief entertained by the inhabitants of the Pyræus, that the epidemic had been occasioned by poison thrown into the water of their cisterns, is one of those

popular opinions which have ever prevailed, in some form or other, in countries which happen to be the seat of war, in order to account for the increased sickness and mortality which always follow in the track of hostile armies.

This version differs in some particulars from other translations; but the reasons assigned may, whether or not admitted, contribute towards a more complete elucidation of the original.

## EXCURSUS I.

WHILE an epidemic is yet *in transitu*,—has not yet fully established itself, that is,—in any locality, premonitory symptoms, which faintly represent those of the coming malady, prevail; but, once the pervading influence is openly manifested, the disorder shews itself, as did that of Athens, in all its intensity, “suddenly and without any ostensible cause.” This is not so obviously the case with ordinary disorders; for although they too arise suddenly, and often advance so rapidly as to leave no apparent interval between health and sickness, yet clinical tact and experience generally enable the practitioner to trace a progression in the disorder



and an ascending scale in the symptoms. Thucydides, after alluding to the sanitary state of Athens previous to the outbreak of the epidemic, has described, after common rumour, the locality where it arose and the direction in which it moved ; and this topographical information is all which can now be gathered of any similar infliction. For the origin of epidemics, or rather the causative influence which first calls them forth, is so shrouded in mystery, that, notwithstanding the advance of natural philosophy, they are, whether regarded in their source, extension, or suppression, altogether inscrutable. Nay ; even the local causes, seemingly so palpable, from which endemic fevers, as remittents or intermittents, or exanthematous affections, as small-pox or measles, periodically arise, evade our researches and baffle even our speculations.

There are certain conditions of soil or atmosphere or social existence which do manifestly give rise to something which is deleterious to the human body, but what that deleterious something is, which can thus transform health into disease, and give to that disease a specific type and a fixed duration, neither physiology nor chymistry can tell. And, hence, we can hardly lay claim to more knowledge, with respect to the nature of epidemics, than could the physicians who were contemporary with Thucydides ; and, in the case of every such infliction, can but repeat his words, that many individuals are struck down suddenly, smitten, as it were, by some mysterious power, and fall from the midst of health to the extremity of suffering and danger.

Having offered these preliminary observations upon the epidemic as a special malady,

we may venture, guided by pathology, (which, as the investigation of disease in morbid structure, was then unknown), to scrutinize the symptoms recorded, and reconcile the discrepancies which are met with both in the original and its versions. The symptoms first noted are naturally those which, so to speak, usher in the malady, and, as indicating the tissue seized upon by the pestilence, they point at once to the seat and type of the disorder. Thus, the first stage is comprised in the few words from *πρῶτον μὲν τῆς κεφαλῆς, κ.τ.λ.* (B.ii, chap. 49) to *βράγχος*, which have been rendered, “Hot flushes about the head; redness and turgescence of the eyes, &c., down to sneezing and hoarseness.” A translation,\* which appeared in 1550, paraphrases rather than translates the opening words, as, “They felt a great heat in the head, whereby their eyes became

\* Nicolls, citizen, London, from the French.

red and inflamed ;” another of 1753,\* gives them as, “ ‘They were suddenly, without any apparent cause, seized at first with headache extremely violent, with inflammations and fiery redness in the eyes ;” Mr. Dale has,† “ others were seized at first with violent heats in the head, and redness and inflammation of the eyes ;” while the Latin version of Baver‡ gives a more literal version in “ Primum quidem acres capitis fervores, et oculorum rubores et inflammatio [thus making *inflammatio* the synonyme for *φλόγωσις*] corripiebat.” Now, it is sufficiently obvious that the historian was guarding his narrative against any such opinion as would have been implied by inflammation, as well as against any hearsay evidence derived from the sufferers or their

\* W. Smith, A.M., London.

† Rev. N. Dale, A.M., 8vo, p. 119.

‡ Londini, 8vo.

attendants which might be fallacious; while he confined himself to what he could himself perceive and judge of. And, therefore, he specifies hot flushes about the head, redness and turgescence or fulness of the eyes, blood-red fauces, fetid breath, sneezing and hoarseness, as facts, which, being within observation, were beyond opinion. For it may be assumed that he never meant, while describing the eyes, (which, by the way, are always necessarily affected in Scarlatina,)\* to employ the term inflammation, because, besides having a professional signification, it is tautological, as it can never be present in any

\* Willan, *e. g.*, speaks of dull redness of the eyes; Huxham mentions, eyes heavy, reddish, and, as it were, weeping; and Withering has, eyes inflamed and watery, or sunk, and dead. But every one must be too well aware of the difficulty of describing, by words, the changes wrought by illness, to expect anything like identity of expression, even for the same features, during the same malady, by different writers.

tissue of the body without redness. Hence, turgescence has here been employed as the representative of *φλόγωσις*,\* because, although nosological writers differ in their definition of it, the term is accepted, generally, as expressive of that appearance of the eyes which prevails in many general affections, and which, although implying both redness of the membrane and fulness of the veins, is not strictly inflammation.

Dr. Arnold, however, judging from his brief commentary, seems disposed to consider the words *θέρμαι ἰσχυραί* as equivalent to *πυρετός* or fever, and, being unacquainted with medicine, he was probably led to this conclusion, because heat, or increase of the natural tem-

\* Phlogosis = "subitus fugaxque æstus cum rubore faciei" (which is very like our blush), according to Vogellius; while Cullen renders it, "Pyrexia, partis externæ rubor, calor, et tensio dolens," which are expressive of phlegmon or boil.

perature of the body, is one of its most important features. But Hippocrates, who was a contemporary of our historian, and cannot but have influenced language upon medical topics, employs *πῦρ*, not *θέρμα*, as the generic term for fever, and, hence, *πυρετός* with the epithet *ῥξύς* for its simple, and *καῦσος* for its more complicated and intense form, as in remittents, goal, typhoid species, &c. ; again, febrile subsidence or intermission with him is *ἄπυρος*, whence our apyrexia ; and his *ἐπιπυρέσσειν* has the force of our secondary or symptomatic fever.

Thus, if this version be admitted, the historian has recorded only such facts as, falling under his own observations, were subject to no other sources of fallacy than those from which our perceptions can never be wholly freed ; and has abstained from describing aches or pains, which some versions have



attributed to him, because, as depending upon the accidents of temperament, sex, and age, they are not to be admitted among those abiding and essential features which pathology selects as the characteristic signs of each disease. The historian, in fact, has laid down, methodically yet broadly, the symptoms which could be appreciated by his own observation and senses, without dwelling on such incidental circumstances as could be gathered only from the sick or those about them. It would have been foreign to his office, even had physiology been far enough advanced for the purpose, to have reasoned upon the causes of the symptoms—to have treated of them, that is, professionally ; but owing to the lucid order and clear expression of his narrative, the deficiency, if it be one, may be readily supplied by modern science. For the hot flushes about the head, the state of the eyes,



and condition of the fauces, were but indices of the change wrought in the capillary circulation of the mucous tissue of the parts; the fetor of the breath was attributable as well to ulcers as to the rapidly decomposing secretions, with which the interior of the fauces must have been covered; the sneezing was occasioned by the irritated membranous or pituitary lining of the nose; and hoarseness, no doubt, depended on the swollen membrane of the larynx, together with the thick tough phlegm, with which the parts around cannot but have been charged. This constitutes the history of the first stage of the disorder, and it involves causes more than enough to account for the despondency, distress, and disturbance, both of the functions of the body and the faculties of the mind, while the very fetid breath points to an abundant source of contagion and consequent spread of human suffering.

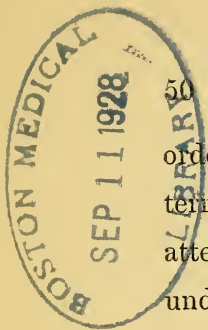
## EXCURSUS II.

THE clinical record, as it may well be considered, proceeds next to delineate the symptoms, as they successively arose, of the second stage, or, in other words, the consequences which ensued from the passage of the morbid action along the membrane lining the respiratory organs ; and it shews how cough, oppression about the heart, hiccup, spasm, and bilious diarrhœa followed in its train. This part of the description begins with the words *καὶ ἐν οὐ πολλῷ χρόνῳ κατέβαινε κ. τ. λ.* (chap. 49,) and their meaning would appear to be sufficiently evident ; but, notwithstanding this, the translators of the passage, with few exceptions, have lost sight of it in a way

which renders it both inaccurate in description and defective in inference. This has, in part, no doubt arisen from the scholars not having collated the original with the literature and the dogmata of medical science, which alone can enable us to read the historian's description aright. It requires, however, but a slight acquaintance with medicine to perceive that the disease, that is the morbid action, as it extended along the membrane of the trachea and its branches, must have occasioned violent and frequent cough ; but in what sense is the disturbance about the heart to be taken ? how can the virus of the disorder have been supposed, by settling on the organ, to have caused its reversion ? It may be answered that the words imply, so slowly is positive knowledge diffused, what words of similar import in use at the present day imply, feelings of anxiety and weight within

the chest, in the region of the heart, together with disturbance of its functions, in palpitation and other signs of sympathy ; and which might all be looked for, seeing the intimate relation between that organ and the pulmonary system. Hiccup is so constant and so prominent a symptom of most deadly maladies, especially of such as affect the membranes of parts within the chest, that, had it not been dwelt upon, the omission would have invalidated the general accuracy of the historian's statement ; and it may well be assumed that, as continuous and violent hiccup, like continuous cough, may excite spasm of some of the fibres of the abdominal or intercostal muscles, an additional spasm to that of the diaphragm was a symptom of the epidemic. And this assumption, if admitted, is a clue not only to the spasm, which must have added greatly to the suffering, but also,

seeing how closely situated the liver is to the diaphragm, to the increased secretion of bile, which, at once, accounts for the many kinds of bilious evacuations as well as the additional torment and distress. Thus, to the second stage of the disorder the record allots the symptoms of cough, feelings of weight and anxiety about the heart, hiccup with a concomitant spasm; and bilious diarrhœa with tormina and distress. But Dr. Arnold, following other versions, or led, it may be, by the modern term cardiac, for the upper or œsophageal orifice of the stomach, and influenced, moreover, by the literal sense of the qualifying adjective *κενή*, as equivalent to our “empty,” makes the words *καὶ ὁπότε ἐς τὴν καρδίαν στήριξαι*, to signify, when the disorder settled on the stomach, and the *λὺγξ κενή*, as corroborative of that reading, to imply an “ineffectual retching”, forgetting that the dis-



## THE HISTORY OF

order was yet in the chest. And hence the terrible hiccup, which is an almost invariable attendant upon every such disease as that under discussion, and, in itself, a source of peculiar suffering if not of additional danger, was entirely overlooked by him, although the term which he renders retching was employed in the sense of hiccup by Plato,\* in his Sym-

\* A reference to the passage in question will satisfy the reader that this unquestionably is the sense in which the word was employed by Plato (*Symposium*, 185, C. Stallbaum).

When Pausanias, at the banquet given by Agathon, had closed his part in the extemporaneous effusion which each of the guests, in turn, was bound to improvise upon the theme fixed upon, Aristodemus, who was acting as what may be called the chairman of the company, exclaimed, It is for Aristophanes now to speak; but, as he has been overtaken by hiccup (*λύγγα ἐπιπεπτωκυῖαν*), the result (it is added) of a surfeit or other such cause, he cannot perform his part yet. Whereupon Aristophanes, addressing the physician Eryximachus, who was reclining next below him, said, It is but fair, Eryximachus, that you should either stop this hiccup, or else, until I may be freed from it, speak in my stead. To which the physician replied, I will comply with both your requests. I will take

posium or Banquet, (to which he has actually referred), as it always was by Hippocrates.

up your part now, as you, when the hiccup may have ceased, shall speak for me ; and if, while I am speaking, the hiccup choose to give way, simply by holding your breath for a long interval, well and good ; if this do not succeed, gargle the throat with water ; but if it continue still violent, snuff up something by which the nose may be tickled and provoked to sneezing ; and, if this be done once or twice, the hiccup, however obstinate, will be arrested. I will perform all your injunctions, said Aristophanes ; and do you no longer delay in performing your part of the engagement.

Now, it may be assumed, from the imperfect acquaintance of that age with the physiology of hiccup—that is, with the structure and uses of the diaphragm, which is, so to speak, its seat, and the influences of the nervous system—that Eryximachus had adopted these several expedients empirically ; had, by mere experience, in other words, learnt all that medicine would now employ in obedience to the laws of the economy. For as holding the breath for a longer interval than usual, gargling the throat, exciting the pituitary membrane and sneezing, all act, more or less directly, upon the diaphragm, they cannot but tend to arrest a hiccup which does not emanate from constitutional disturbance. As the hiccup by which Aristophanes was annoyed has no qualifying epithet, the term evidently designated one of those temporary paroxysms which arise, from some unknown cause, out of



However strange it may appear, the earlier translators have taken the same view of the passage:—thus, that of 1550 gives it, “The disorder descended into the stomach, which caused a great cough, that did right sharply pain them, and after that the matter came to the heart, it provoked them to a vomit;” that of 1755, “Not long after the malady descended to the breast, with a violent cough; but when once settled on the stomach, it ex-

the sympathy between the great muscular boundary of the chest and the stomach, during the process of digestion. But the λύγξ of the epidemic, with its accessory κενη, is, no doubt, although equally mysterious, an essentially different disturbance, and points to the causes, whatever these may be, which give specific characters to constitutional disorders.

The scholar too, in this celebrated model of elocution, may find topics for reflection in the association, on this occasion, of Socrates with Aristophanes, and conjecturing how the satirist may have been affected while listening to the glowing and ingenuous testimony borne, by the accomplished and youthful Alcibiades, to the purity, manly courage, and lofty yet homely wisdom of the Athenian sage.



cited vomitings, in which were thrown up discharges of bile, attended with excessive torture ;” and even Mr. Dale takes the same course, “ In a short time, the pain descended to the chest with a violent cough. When it settled on the stomach, it caused vomiting, and all the discharges of bile that have been mentioned by physicians succeeded, and these were accompanied with great suffering.”

Thus, all these versions, by some unaccountable oversight, as the disorder was yet in the chest, leave out the hiccup, and substitute, for its tormenting action, gastric disturbance or vomiting. But not so the Latin version, which gives the words literally, as “ ubi vero in corde hæserat morbus, cum ipsum subvertebat, tum etiam omnes bilis evacuationes, quotquot a medicis nominatæ sunt sequebantur, et ipsæ cum ingenti cruciatu ; singultus plerisque incidebat inanis,

vehementem afferens convulsionem, in aliquibus quidem statim cessantem, in nonnullis multo serius." But another writer\* seems to have taken an intermediate course, as, "When it was once settled about the mouth of the stomach, a retching and vomiting of bilious stuff, in as great variety as ever was known among physicians, succeeded; many were seized with a hiccup, that brought up nothing, but occasioned a violent convulsion, which in some went off presently, but in others continued much longer;" and Bishop Thirlwall gives the passage as: "In the region of the heart its presence was marked by distressing qualms, discharges of bile, and distressing hiccup."

The epithet *κενή* is applied in the original to the generic term *λύγξ*, and although it was,

\* *Account of the Plague of Athens.* J. Clifton, M.D. 8vo, 1734.

no doubt, expressive of some substantive modification, yet, as is the case with many epithets, its exact equivalent in another language can hardly be lighted upon. The Latin translation has adopted *inanis* as its synonyme, and such, no doubt, is its ordinary sense ; but here it cannot explain in what the paroxysm differed from ordinary hiccup. In this version, the term has been rendered by the word “hollow,” because, as it was accompanied by spasm, there may not improbably have been, during the violence of the attack, a foveola or hollow about the scrobiculus cordis, that is the pit of the stomach ; but this too, it must be confessed, is only conjectural.

It is somewhat disheartening, after collating these versions with the original, to have to admit that, notwithstanding the elevation of medicine to a science, this early record of disease far transcends its modern

versions; and that the original may still, on account of its method and clearness, be ever referred to, even by professional teachers, as a model of didactic clinical writing.

In support of the reading here followed, it may be submitted to scholars that Dobree and other commentators have joined *λωφήσαντα* with *σπασμόν*, which, perhaps, may be the more natural order of the Greek; but then, the words so taken, would imply that "the spasm, in some instances, came on immediately after the hiccup had ceased, while, in other cases, there was an interval, a state of quiescence, that is, between them." But as it is difficult, or impossible rather, to get out of this collocation of the words any meaning such as professional experience can sanction, it has been deemed necessary to associate *λωφήσαντα* with *σπασμόν*, and this reading will admit of the sense given to the passage in this version.

## EXCURSUS III.

As a prelude to the third and last acute stage of the epidemic, the historian alludes to those general symptoms which characterise, with more or less intensity, all deadly maladies; and which, not being peculiar to any special disorder, have been considered by him apart from other signs of disturbance. Those symptoms are, the temperature of the body, the sense of heat within, thirst, jactitation, sleeplessness, and, last not least, the feeling of despair which was coexistent with the attack. The startling contrast here alluded to between the moderate heat of the exterior of the body, as judged of by the hand of the attendant, and the burning heat within, which could be sen-

sible only to the sufferer, is witnessed in some of the worst forms of fever, and always, to a remarkable extent, in what is now designated Asiatic or spasmodic cholera; and it testifies to the perversion, if the term be admissible, of the sentient and circulating systems.

But what is the precise signification of the terms (*φλύκταιναι καὶ ἔλκεα*) which are employed to particularize the eruption on the surface? Now, until after the opening of the present century, English medicine may be said to have had no settled definition of the several forms of cutaneous changes, and scholars may well be excused, therefore, if they have not succeeded in fixing upon fit representatives for those of the text. An old translator,\* however, who drew from a French version, had lighted, rather happily, upon the meaning of the first term, as "little thin blains"; for if

\* Nicoll's folio, 1555.

these words be synonymes for vesicles or blebs, he had anticipated the definitions of modern nosologists.\* But other writers, forgetful of the root of *φλύκταινα* in *φλύω* or *φλύζω*, have described the appearances as “little pustules and sores”, “little pimply eruptions and sores”, or “small pimples and sores”; and the first of these has been adopted by the Latin version before quoted, in “*parvis pustulis et ulceribus efflorescens corpus.*” There can be no doubt, however, when the eruption is considered in its relation to the parent malady, that the word meant vesicles or blebs, larger or smaller, and as these would readily, from the many accidents of sickness, degenerate into sores or *ulcers*, this consideration settles the meaning of the other term or *ἔλκεα*. The historian has

\* Phlyctæna=vesicula fluido seroso plena—Sauvages.  
Phlyctæna=vesicula parva fluido seroso plena, quæ deinde sponte rumpitur. Sagari Syst<sup>a</sup>.



also alluded to that sleeplessness and incessant tossing to and fro, or jactitation, those terrible features of most mortal maladies, and which must be witnessed to be adequately appreciated; but yet the body, notwithstanding this strain upon it, was neither sensibly emaciated, nor its strength exhausted, until the acute stages were past.\* It may be doubted, however, if modern theory may be adduced in opposition to a statement of fact, whether the precise period which has been assigned for the fatal termination of the malady is not hypothetical, and whether it can be considered more than an approximation to a general re-

\* Many patients sink under this disease unexpectedly at a very early period, as on the second, third, or fourth day, no symptoms having preceded which could excite an apprehension of immediate danger. More than two-thirds of those who were affected by the Scarlatina Maligna in 1786-7, died between the seventh and nineteenth day of the disease.—Willan on the *Scarl. Malig.*, p. 277.



sult, if not a blind submission to the Hippocratic doctrine of critical days. For so many accidents and conditions, independently of treatment, conspire to influence the duration of constitutional disorders, that, even granting every such malady to have its own period, still, as our prognosis is not delicate enough to discern its allotted day and hour, medical science\* has almost rejected that precise judgment which was so much insisted upon by the great father of physic. And

\* Goethe, who, as is well known, had cultivated medicine and its collateral studies, has well exemplified the definite duration of acute disorder in his comparison of one who, under intense anxiety and overwhelming despair, is driven to commit suicide, with a patient under protracted fever; for it is as unavailing, he says, to recommend the former to wait until time, moderating the distracted feelings, shall have brought consolation, as it is to bid the latter, in the last stage of sickness and all but exhausted, to hold out a little longer, as, in a short time, the tumult of his blood will be calmed, his humours purified, and his strength restored. (*Leiden des J. W.*, p. 71.)

although every case of acute disorder, like the body under its influence, is, so to say, an individuality, and therefore subject, could we but detect them, to its own laws, yet it is obviously subordinated, for its continuance, to the age, temperament, and the vital power of the constitution at large. The sufferers who survived the fierceness of the acute stages had still, it is said, to endure another, and that a chronic condition, which was held to be ulceration within the abdomen, and which, being accompanied by profuse diarrhœa, exhausted eventually, sooner or later, the little strength that remained. To many it may appear hazardous on the part of the historian to have alluded to internal ulceration, as disease had not, in his age, been pathologically inquired into—morbid structure, in other words, was then unknown; but he would naturally, it may be said, have been led to this conclusion

from the quantity of mucus which the lining membrane of the large bowel, when irritated, can pour out, and which, by its resemblance to pus, would have given countenance to the opinion. He refers next to those terrible repercussions, if the term be admissible, which sometimes terminate life suddenly, after danger is apparently over, by serous effusions into the cavities, or else, as in other disorders of the same class, by settling, to use a trivial expression, on particular organs or joints, leave behind them abiding traces of the virulence and tenacity of the parent malady. Modern medicine\* also abounds with cases of patients who, after having withstood the violence of a first attack, “have had, nevertheless, to struggle through a series of most untoward circumstances, which have continued far beyond the febrile period ; as also instances

\* Willan, op. cit.

of recovery after the parties have been thus harassed, almost incessantly, for six or eight weeks." The words employed to describe the local injury of parts are not to be taken literally, as they must evidently have implied, not absolute mutilation, but the loss of the use of the members or organs—thus, the joints, having been ankylosed, did not admit of any separate movement; the cornea, having become opaque, and, therefore, unfit for transmitting light, precluded vision,—or, in other words, sight was lost; and the brain, having, by continued vascular excitement, been debilitated, could not but have impaired the memory or other faculty of the mind. But many of these results of great local disturbance, save, perhaps, the opacity of the cornea, must have been either modified or removed, under the conjoined influences of time, that great physician, and renovated health.

## SECOND PART.

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[Chap. 51.]

SUCH then, according to the historian, were the general features of this disease; and, so long as it prevailed, ordinary maladies were very rare, or any which did occur assumed, eventually, its character. It seemed to matter little for the safety of those who were attacked whether they were attended to or not, as some perished amid neglect, and some died notwithstanding all the advantages of nursing and treatment. For there was no settled remedy which could be relied on, as that which, seemingly, did good to one was harmful to another; and no constitution of body, whether strong or weak, appeared to be proof against it, as all alike, even such as had previously been

dietetically treated, yielded to its influence. But the most terrible part of the whole infliction was the despondency which took possession of the mind as soon as any one felt that he was sickening; for the sufferers, losing at once all hope and offering no moral resistance, rather gave themselves up to than were subdued by the malady; and being, moreover, charged with infection, from attending on one another, they died like sheep. This was, it may be added, the cause of the greatest mortality, as they, who, through fear, were unwilling to maintain their wonted intercourse, were so completely deserted that whole households were swept away, from the want of attendants; while most of those who would still visit their friends were seized by the pestilence. And this applies particularly to persons who had any pretensions to goodness, as, from refinement of feeling, they

were unsparing of themselves, and remitted none of their attentions even after the members of the family had been worn out by the moanings of the dying, and were overcome by the extremity of the infliction. Still more, however, than these, did they who had passed safely through the malady shew pity for the dying and the suffering, as well from their foreseeing what was yet to be endured as from the feeling of security in the future, since the disease never attacked the same individual a second time, at least never so as to prove fatal. And, hence, all such persons were warmly felicitated by others, while they, in the excess of their present joy, entertained something like a hope that they were never to be carried off by any other disease.

[Chap. 52.]

The removal from the country into the city was to all but especially to the last comers



an additional load of suffering ; for, as houses were not to be had, many were compelled, in the hot season, to put up in close ill-ventilated huts, and destruction spread so far without restraint, that the dead and dying lay heaped upon one another, and half-dead creatures were to be seen rolling about in the streets and around the fountains, from their longing for water. The sacred places wherein they had quartered themselves were full of the bodies of those who had died there, for, under this heavy calamity, men, not knowing whither to turn themselves, held in little respect either things sacred or things profane. And even the laws of burial, which had hitherto been observed, were so disregarded that individuals disposed of the dead of their household, as best they could ; and many, from the want of suitable materials, owing to their having already buried several friends, had recourse to scan-



dalous expedients : some, for instance, placed the corpse on a pile which had been put up by others, and, anticipating their arrival, set fire to it ; while others cast the dead body which they were carrying on a pile yet burning, and went their way.

[Chap. 53.]

In other respects also, this pestilence was the origin of lawlessness in the city, to an extent beyond what had ever before existed. For individuals now, seeing the rapid changes of fortune by death, more openly ventured upon deeds which, at another time, from feeling they were not to follow merely their own inclinations, they would have shrunk from. Holding life and wealth, in fact, to be but ephemeral gifts, they considered themselves justified in seizing upon present enjoyment, and devoting themselves to pleasure. No one was inclined to persevere in right doing, because of the

apparent uncertainty whether he should be spared long enough to reap its reward; and, hence, whatever at the moment was agreeable and profitable came to be regarded as honourable and expedient. Neither the sanctions of religion nor the laws of man served any longer as restraints, for, as all alike were cut off, piety and impiety came to be regarded as mere words; while, on the other hand, none expected to be spared long enough to pay the penalty for offences against society. The fear of every other punishment was, in fact, absorbed in that far heavier sentence which was hanging over them in the pestilence, and which, while yet suspended, seemed to be the apology for sensual gratification.

Notwithstanding, however, instances of degeneracy and impatience, the heart of the Athenians never faltered with respect to the war, and it must be admitted that, in their

country's cause, they endured, with heroic constancy, this accumulated affliction of a fearful pestilence within their city and a powerful enemy laying waste their lands beyond it.

Although the epidemic, during this second inroad, was at its height, and carrying off the Athenians at home as well as those who were in the fleet which was employed against the enemy abroad, yet, by one of those exceptions which confound the generalizations of science, the Peloponnesians remained, it may be said, almost unaffected by it. And this relative healthiness will appear the more surprising when it is recollected that the Peloponnesians had to advance through a country already, in some degree, devastated by the inhabitants on their retreat, and which, in itself, must have been a focus for disease, and a ready recipient of that prevalent virus which then

was wasting the population within the walls of Athens. The invading army seem to have been made aware of the presence of the pestilence only by the reports of deserters and the distant funeral fires within their sight; and although it was said that they had, on this account, retired sooner than had been intended, yet the inroad lasted not less than forty days, and was longer than any other during the war. The malady, however, at a later period, invaded the more populous towns of Attica, and appeared also in the Peloponnesus; but yet so mildly as to have attracted little or no attention.

[Chap. 58.]

The epidemic, in fact, clung still to the Athenians even in another climate; and the expedition, which was dispatched that same summer, under Hagnon, against Potidæa and the Chalcideans of Thrace, had, in conse-

quence of its prevalence, to return to Athens, without having effected any of its objects. For the pestilence spread not only among the men of this force, but it infected also those who were already serving there, and who, until then, had been healthy; and the armament, within forty days, lost one thousand and fifty out of the four thousand chosen troops who had embarked so shortly before on this service.

If the study of medicine were not constantly presenting topics which show how much knowledge is yet required to raise it above opinion, the enlightened physician might well regard with feelings akin to wonder this wide and mysterious progress of a something which carried with it, along this wide track of country, a destructive disease; and which, after putting forth all its virulence and attaining to its maximum of power, abated

for a time, and, after a considerable interval, reappeared with something of its pristine activity.\* What pabulum for this virus, which had come from so far and spread so wide, could Athens offer, which might not equally have been predicated of Eubœa, or of Thebes, or Corinth, or any other part of the Morea? Why did it not display itself at the time when all the conditions for its reception, from the disorganized state of the city, were most prevalent? Whence this interval until the people, having passed through that first stage of wretchedness, were becoming somewhat reconciled, from a sense of duty, to a

\* The epidemic broke out in the second year, as has been said, of the war, and, having raged with peculiar violence for a season, it became, during the third and fourth years, less frequent and less severe in its attacks; but in the fifth year it revived, so to speak, with something of its original intensity, and again declined and eventually disappeared.

mode of life which to them must have been peculiarly ungenial? Now, the only answer to these questions, notwithstanding the advance made in all the branches of natural science, is, that although physiology can discern local causes which have power to eliminate disease capable, by contagion, of reproducing like conditions, it cannot trace, because it cannot detect, those changes which are ever, it may be assumed, going on among electrical magnetic and thermal agencies, since they are too impalpable for observation and too subtle even for hypothesis. And, hence, as the essential cause of epidemics is inscrutable, it only remains for us to submit to the interdict, and limit our inquiries to the conditions which are most receptive of them, and the means which can best be relied on for modifying their intensity and averting their destructive influences.

As this essay has to do only with the epidemic, which, occurring at an eventful period, has secured an abiding record in the history of Thucydides, a brief summary will suffice for the elucidation of the contemporaneous incidents.

The Peloponnesians continued, during the early part of the war, with the exception of two years, to make their inroads, while the Athenians, so long as they were influenced by the counsels of Pericles, acting on the defensive at home and never hazarding their cause by attempting conquests abroad, remained, substantively, uninjured. And had it not been for the ill-judged expedition to Syracuse, which was undertaken against all that their great statesman had ever insisted on, and when the exaggerated expectations of the people found no restraint in the assembly, the Athenians must have come forth from the



contest victorious, and in possession of all that weight and influence, for the maintenance of which they had first entered upon the war and submitted to its many sacrifices.

[Chap. 65.]

Thucydides, before, so to speak, taking leave of Pericles, bears this testimony to him, that, so long as he presided over the state, he governed it with moderation in time of peace, and, while preserving it from injury, advanced it to the highest greatness; and that when war broke out, he appeared then also to have had a clear perception of his country's power. He survived its commencement two years and six months; and, when he was taken away, his foresight, with respect to its proper conduct, was yet more fully recognized. For he had ever maintained that, by remaining, during the war, on the defensive at home, and encouraging their marine; abstaining from

foreign conquests, and never exposing their city to danger, they would, eventually, come forth from the struggle victorious. But the Athenians did the very contrary of all this, by adopting measures which, besides having no relation to the war, being suggested either for private gain or personal ambition, wrought evil both to themselves and their allies; as, while those measures, if successful, tended only to the honour and profit of individuals, the injury resulting from their failure recoiled on the state, and crippled its means of resistance.

Thucydides has left it to biography\* to record the close of that eminent man's existence, and from it we learn that the malady of which he died was like the epidemic, although its attack was neither so acute nor so vehement as in other cases; and this seems to show that the parent malady had then lost much of its original

\* Plutarchi Pericles, xxxviii.

character and intensity. For his illness assumed rather the form of a slow chronic malady having many vicissitudes (having, that is, exacerbations and remissions), which gradually exhausted the strength of his body, and impaired the faculties of his mind; or, in other words, rendered him, at times, delirious. Two interesting anecdotes concerning his last hours have been gathered from the writings of Theophrastus—one is, that, during his illness, he called the attention of a friend, who was standing by, to an amulet or charm, which the women had hung about his neck, observing, he must be far gone indeed when he could be brought to submit to so silly an expedient; and, according to the other, when near his end, and surrounded by the most distinguished citizens together with his personal friends, who sat discoursing of his noble qualities, and recounting his brilliant deeds and the

number of victories which he had gained for the honour and welfare of Athens, he broke in upon the conversation, to the amazement of the bye-standers, who supposed him to be insensible, and expressed his surprise at their thus eulogizing and dwelling upon actions which, being among the gifts of fortune, belonged not exclusively to any commander, and yet making no mention of that which was *his* highest and best *claim* to distinction—in that, he said emphatically, “no Athenian citizen has ever had, through me, to put on mourning.”

This sudden resumption of consciousness from apparent insensibility, and recovery of reason from deep coma or wandering delirium, are features of the more deadly forms of fever, and of those more especially which are endemic in the warm latitudes. Aretæus\* of

\* Περὶ Κανόνων, κεφ. δ'. 41.

Cappadocia, a distinguished medical writer of the middle of the first century, after enumerating symptoms which, towards the close of a fatal case, too clearly indicate approaching dissolution—when life, to use his own words, like the ebb tide of a river, is fast running out, observes, that, occasionally, under these conditions, there is a sudden restoration of the soul—every sense becomes clear, the judgment acute, and the prophetic faculty so bright as to foretell the coming death as well as events which, in time, are verified. This rapid change from disorder to apparent quiet and a seeming dawn of recovery, which pathology would now attribute to some kind of lesion in the brain, was set down by the Greek physician to causes so metaphysical, that science cannot entertain them. Yet his statement of symptoms includes pulsations, as if the blood's current was then considered an item in symp-

tomatology. An analogous example,\* in modern practice, of sudden but transient subsidence of symptoms, has been given as a commentary upon this clinical description by Aretæus; but in this, and, probably, in every such instance, while all else had been calmed, “the pulse was quicker than ever.” The subject, a young gentleman, æt. 24, who had been using mercury very largely, caught cold, and became seriously ill with fever; on the fifth day his head was affected, and on the seventh “he was in the highest possible state of excitement”; but on the eleventh day he had become quite calm and seemed much better. It was remarked, however, that he had said, repeatedly, that he should die; and that under this conviction he had spoken with great composure of his affairs, dictated messages expressive of affection to his mother, who was abroad, and talked much of

\* On the *Kάυσος* of Aretæus. Essay vi, p. 81.

a sister who had died the year before, and whom, he said, he knew he was about to follow immediately. Notwithstanding this composure of the mind and quiet of the body, his physician, finding that the patient had neither slept nor the pulse come down, perceived that his improvement was only transient, and the clearing up of his mind but a mortal sign, “a lightening before death”; and he died that night. But let it be added that it is not always so; as, sometimes, this deadly lull, as it may be termed, gives to the patient, even to an inexperienced practitioner, hopes of recovery, which are soon to be dispelled by sudden syncope or convulsions, the precursors of death. Instances are not wanting of patients who, at the moment of this sudden transition, have resumed their wonted air and manner; have spoken of their illness as over, and their convalescence at hand; or have risen, sat at



their toilet, and then, to the additional distress of friends, who could not but trust in promises so fair, have returned to their bed to die.

In fine, if it were asked, with respect to the epidemic which is the subject of this inquiry, whether such an infliction, should it light on an European capital, could be more successfully treated now than it was then, we fear it must be answered that, although the seat of the disorder would be traceable and its influences calculable (although, that is, a clear diagnosis and a probable prognosis could now be formed), yet medicine, as an art, would fail in the attempt to arrest its progress or trammel up its consequences. For as the malady began in the head, and, as by a law, had to pass along the cavities of the body, it is obvious that therapeutics, or, in other words, treatment and nursing must be restricted to the task of moderating symptoms and averting



whatever might tend to vitiate or enfeeble the constitutional powers. And although this may appear but an humble part for medicine to play, yet, in our present state of knowledge, so much depends on its right performance, that the enlightened practitioner will ever respect those minute observances and precautions which were so much insisted on by Hippocrates, and which may be regarded as essentials in clinical practice.

Thus, were such an epidemic to arrive, we should still, in too many instances, notwithstanding the advance of medical science, have to confess, with the physicians of that far distant age, that, whether patients were attended to or neglected, whether prophylactically treated or left to chance, the result seemed to be the same. But still medicine might have now a wider influence, through the constitution, upon the first stages of the disorder,

and, through that influence, might moderate the intensity of symptoms and so cherish those vital powers, upon which, humanly speaking, must depend the possibility of surviving the duration of the disorder. And it may with confidence be affirmed that all the alleged consequences of the malady could, with far greater certainty, in this day, be alleviated or removed, than could have been effected when medicine, from the want of a physiological basis, was but a refined empiricism.





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